

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): Telecommunication equipment for setting up local telephone connections between at least one mobile telephone, belonging to only a private network, and a public network, the equipment comprising:

a downstream radio access system for setting up a downstream link to a base transceiver station of a public mobile telephone network, and

an upstream radio access system for setting up an upstream link to a mobile telephone of the private network,

wherein:

the upstream system and the downstream system apply the same mobile telephone standard, which is that of the public mobile telephone network, and

the equipment further comprising a service signal converter module between the upstream system and the downstream system adapted to:

repeat signals received from the upstream and downstream systems, and adapt the received signals to suit the characteristics of the downstream and the upstream link, respectively, and

extract from the signaling information specific to the mobile telephones belonging to the private network and used to manage calls between the terminals of the private network and store that information in a local database.

the downstream system or the converter module further comprising a plurality of modules for identifying public mobile telephone network users, and
the converter module further comprising means for choosing one or more identification modules in accordance with a criterion related to a contract of the user.

2. (previously presented): Telecommunication equipment according to claim 1, wherein the downstream system comprises means for simulating mobile terminal links.

3. (previously presented): Telecommunication equipment according to claim 1, wherein the upstream system comprises means for simulating base transceiver station links.

4. (canceled).

5. (canceled).

6. (previously presented): Equipment according to claim 1, wherein the converter module comprises means for:

detecting, by means of a database, that the user of a mobile telephone terminal has a contract with the GSM public network and

for carrying out transfer without using any of the subscriber resources of the downstream system.

7. (previously presented): Equipment according to claim 1, wherein the upstream system further comprises means for connecting a DECT or landline telephone.

8. (previously presented): The telecommunication equipment according to claim 1, wherein said upstream system comprises a radio transceiver and electronic circuits, and wherein said radio transceiver and said electronic circuit set up upstream GSM links with at least one local GSM cellular telephone.

9. (previously presented): The telecommunication equipment according to claim 1, wherein said downstream system comprises a radio transceiver and electronic circuits, and wherein said radio transceiver and said electronic circuits set up a downstream GSM link with a base transceiver station of the public GSM network.

10. (previously presented): The telecommunication equipment according to claim 1, wherein said information extracted from the signaling comprises:

a type of a call, wherein the type of the call comprises one of an outgoing call from a mobile and an incoming call received from a mobile;

a nature of a call, wherein the nature of the call comprises voice or data; and

a user identifier, wherein the user identifier comprises an international mobile subscriber identifier or a temporary mobile subscriber identifier.

11. (previously presented): The telecommunication equipment according to claim 1, wherein said information extracted from the signaling forms a descriptor of a local call.

12. (previously presented): The telecommunication equipment according to claim 1, wherein said information extracted from the signaling is extracted from the signaling by a signaling capture and a processing card, and wherein said signaling capture and said processing card process the signaling in order to format it for use by said service signal converter module.

13. (previously presented): The telecommunication equipment according to claim 1, wherein said information stored in the local database comprises:

a location information;

a temporary mobile subscriber identifier;

an encryption key;

an authentication key;

a result of a calculation performed in the public network to authenticate a user; and

an identity of algorithms used for encryption and authentication.

14. (previously presented): Telecommunication equipment according to claim 1, wherein the upstream system further comprises means for connecting a landline telephone.

15. (previously presented): Telecommunication equipment according to claim 1, wherein said information extracted from the signaling comprises a user identifier, wherein the user identifier comprises an international mobile subscriber identifier.

16. (previously presented): Telecommunication equipment according to claim 1, wherein said information extracted from the signaling comprises a user identifier, wherein the user identifier comprises a temporary mobile subscriber identifier.